

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Gary M. Jacobs (Reg. No. 28,861) on May 8, 2008.

2. The claims have been amended as follows:

1. (Currently Amended) A print control apparatus which uses a spooler to receive print data and temporarily save the print data as intermediate data for output of document data in accordance with a document data print instruction, comprising:

a previewer configured to read out image data that is generated based on the intermediate data and perform a preview operation; and

a print processor configured to activate said previewer if the previewer is set so as to display the a preview of the image data when said print processor is activated by the spooler, generate a preview file in response to issuing of an image generation request by said previewer, cause an image data generator to save the image data generated based on the intermediate data in the preview file, and notify said previewer of a file identifier of said preview file,

wherein said previewer reads out the image data based on the file identifier sent by said print processor, and performs the preview operation.

2. (Previously Presented) The apparatus according to claim 1, wherein the image generation request issued by said previewer includes designation information on a size or resolution of image data to be generated, and said print processor controls said image data generator so as to generate the image data at the size or resolution designated by the designation information.

3. (Previously Presented) The apparatus according to claim 1, wherein the image generation request issued by said previewer includes page number information on a total number of pages of image data to be generated, and said print processor controls the image data generator so as to generate image data corresponding to a page number designated by the page number information.

4. (Currently Amended) The apparatus according to claim 1, wherein a print image file storing bitmap data convertible to a print command is generated from the intermediate data, and the image generation request issued by said previewer includes the number of colors used for the bitmap data stored in a the print image file, or a subtractive process used to create the bitmap data.

5. (Currently Amended) The apparatus according to claim 1, wherein the print data comprises designated print data designated by a user to be printed, the image data read out by said previewer corresponds to designated print data, said print processor creates a designated number of preview files for saving the generated image data generated by the image data generator, and stores the preview display information based on the generated image data in [[the]] at least one of the preview files file, and

when preview display is designated by the a print instruction and preview display information corresponding to the designated print data image is stored in one of the preview files the file, said previewer displays a preview window representing an image of the print data image on the basis of the information read out from the one of the preview files file.

6. (Currently Amended) The apparatus according to claim 1, wherein when said previewer issues an inquiry about whether the print data to be printed is temporarily saved as the intermediate data, said print processor sends a reply to the inquiry.

7. (Previously Presented) The apparatus according to claim 6, wherein when said previewer issues an inquiry about a total number of pages in actually printing a target document data, said print processor sends a reply to the inquiry.

8. (Currently Amended) The apparatus according to claim 1, wherein said print processor controls a printing apparatus so as to print the print saved image data in accordance with a print start request.

9 - 10. (Cancelled)

11. (Currently Amended) A print control method of controlling an apparatus which uses a spooler to receive print data and temporarily to save the print data as intermediate data for output of document data in accordance with a document data print instruction, comprising:

an activating step of activating a previewer if set to a preview display of image data that is generated based on the intermediate data when a print processor is activated by the spooler;

a processing step of generating a preview file in response to the issuing of an image generation request by the previewer, causing an image data generator to save the image data generated based on the intermediate data in the preview file, and notifying the previewer of a file identifier of the preview file in response to an image generation request from the previewer activated in said activating step;

a reading step of reading the image data from the preview file based upon the file identifier; and

a displaying step of displaying the image data.

12. (Previously Presented) The method according to claim 11, wherein in said processing step, the image data generator generates the image data at a designated size or resolution.

13. (Previously Presented) The method according to claim 11, wherein in said processing step, the image data generator generates image data corresponding to a page number designated by a total number of pages to be printed as an image data generation object based on the intermediate data.

14. (Currently Amended) The method according to claim 11, wherein a print image file storing bitmap data convertible to a print command is generated from the intermediate data, and in said processing step, the image generation request issued by the previewer includes a designated number of colors used for the bitmap data stored in a the print image file or a subtractive process used to create the bitmap data.

15. (Currently Amended) The method according to claim 11, wherein the print data comprises designated print data designated by a user to be printed,

the image data read out by said previewer corresponds to designated print data,
in said processing step, a designated number of preview files for saving the
image data generated by the image data generator is created to store the generated
image data in one of the preview files file, and

in the displaying step, when image data corresponding to a preview display the
designated print data image is stored in one of the preview files the file, a preview
window representing an image of the print data image is displayed on the basis of the
image data read out from the one of the preview files the file.

16. (Previously Presented) A computer program stored on a computer-readable
medium, for print control operating under an operating system included in a computer,
which uses a spooler provided by the operating system to receive print data and for
temporarily storing the print data as intermediate data to be output, said program
enabling a computer to perform a method comprising:

an activating step of activating a previewer if set to preview display of image data
that is generated based on the intermediate data when a print processor is activated by
the spooler;

a processing step of generating a preview file in response to the issuing of an
image generation request by the previewer, causing an image data generator to save
the image data generated based on the intermediate data in the preview file, and
notifying the previewer of a file identifier of the preview file in response to an image
generation request from the previewer activated in said activating step;

a reading step of reading the image data from the preview file based upon the file identifier; and

a displaying step of displaying the image data.

17. (Previously Presented) The computer program according to claim 16, wherein

the image generation request issued by the previewer includes designation information on a size or resolution of image data to be generated, and

in said processing step the image data generator generates the image data at the size or resolution designated by the designation information.

18. (Previously Presented) The computer program according to claim 16, wherein

the image generation request issued by the previewer includes page number information on a total number of pages of image data to be generated, and

in said processing step the image data generator generates image data corresponding to a page number designated by the page number information.

19. (Currently Amended) The computer program according to claim 16, wherein a print image file storing bitmap data convertible to a print command is generated from the intermediate data, and the image generation request issued by the previewer includes the number of colors used for the bitmap data stored in a the print image file, or a subtractive process used to create the bitmap data.

20. (Currently Amended) The computer program according to claim 16, wherein the print data comprises designated print data designated by a user to be printed,

the image data read out by said previewer corresponds to designated print data,
in said processing step a designated number of preview files for saving the
image data generated by the image data generator are created to store the the
generated image data in one of the preview files the file, and

the displaying step is executed to, when image data corresponding to the
designated print data a preview display designated print image is stored in one of the
preview files the file, display a preview window representing an image of the print data
image on the basis of the image data read out from one of the preview files the file.

21. (Currently Amended) The computer program according to claim 16, wherein
said processing step is executed to, when the previewer issues an inquiry about
whether print data to be printed is temporarily saved as the intermediate data, send a
reply to the inquiry.

22. (Previously Presented) The computer program according to claim 21,
wherein said processing step is executed to, when the previewer issues an inquiry
about a total number of pages in actually printing the target document data, send a reply
to the inquiry.

23. (Previously Presented) The computer program according to claim 16,
wherein said processing step is executed to control so as to generate the image data by
the image data generator on the basis of the temporarily saved intermediate data in
accordance with a print start request, and control a printing apparatus so as to print on
the basis of the generated image data.

24 - 34. (Cancelled)

Drawings

3. The drawings filed on 9/9/03 are acceptable.

ALLOWANCE

Allowable Subject Matter

4. **Claims 1-8 and 11-23** are allowed. These claims will be renumbered as 1-21.
5. The following is an examiner's statement of reasons for allowance:

The prior art of record do not teach or suggest the claim limitation of the print processor for activating said previewer if the previewer is set so as to display a preview of the image data when said print processor is activated by the spooler, generating a preview file in response to issuing of an image generation request by said previewer, causing an image data generator to save the image data generated based on the intermediate data in the preview file, and notifying said previewer of a file identifier of said preview file.

The features identified, in combination with other claim limitations, are neither suggested nor discussed by the prior art of record.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571)272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward L. Coles/
Supervisory Patent Examiner, Art Unit 2625

/CHAN S PARK/
Examiner, Art Unit 2625

May 8, 2008